Collider Accelerator Department

Title: Material Handling, Storage, & Shipping CAD-QAP-502
Rev. A

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1.0 Purpose

To provide a summary of requirements which will assist in the prevention of damage and minimize deterioration during the handling, storage and shipping, including BNL Internal Transportation, of items and material.

2.0 Scope

The requirements of this document apply to receiving, material staging, manufacturing and shipping areas.

3.0 Policy

- 3.1 Items will be handled, cleaned, stored, packaged, preserved, and shipped in accordance with the requirements of applicable national codes and standards, federal regulations or specifications, and BNL safety and other directives.
- 3.2 Special and additional requirements for handling, cleaning, storing, packaging, preserving, and shipping will be specified, as required, by the cognizant engineer or scientist (CE/CS) on drawings, specifications, instructions, and work-authorizing documents.

4.0 Procedure

- 4.1 The CE/CS at the time a Purchasing Request (PR), an Intra Laboratory Requisition (ILR), a traveler, or any other form of work instruction is prepared shall determine if items or material being requisitioned, utilized or produced are susceptible to damage or deterioration, and if so, should consider the following (as applicable);
 - 4.1.1 Special handling, storage, cleaning, maintenance, packing, preservation or shipping instructions and/or procedures;
 - 4.1.2 Special handling tools, lifting and/or storage equipment (e.g. containers, shock absorbers, accelerometers);
 - 4.1.3 Special protective environments (e.g. inert gas atmosphere, specific humidity levels and/or temperature levels);
 - 4.1.4 Method to identify material, and the need for warning notes, labels, or tags.
- 4.2 The CE/CS are responsible for taking necessary actions to prevent damage and minimize deterioration of items and materials that they handle or store which have been identified as being susceptible to damage or deterioration.
- 4.3 Upon arrival of transported items, personnel responsible for the receipt of material, shall as appropriate: verify the item's identification (which may include the model, part, serial,

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and/or lot number) and quantity or weight; examine the shipment for damage; deliver the items to the location designated on the procurement documentation.

- 4.4 Personnel responsible for the storage of material shall ensure that the identification of these items comply with all procedures, instructions and notes pertaining to material handling, storage and shipping that appear in ILRs, travelers, and any other form of work instruction.
- 4.5 Personnel performing operations pertaining to material handling, storage and shipping shall be experienced with, or trained in the use of equipment and procedures or instructions applicable to those operations.
- 4.8 Material, tooling, support equipment, and test equipment damaged during handling, transportation, or storage at BNL, shall be documented and, when appropriate, processed in accordance with AGS-QAP-302, Nonconforming Material Control.

Note: Items and lots of material that are rejected, nonconforming and awaiting disposition, obsolete, awaiting inspection and/or test shall be uniquely identified and/or segregated, whenever feasible, from acceptable items. The segregation or identification of items and lots that are not acceptable shall be adequate to prevent their inadvertent use.